

REMARKS

In the December 20, 2002 Office Action, all of the claims stand rejected in view of prior art. Claims 1-19 also stand rejected for failing to indicate and claim particularly and distinctly the subject matter that Applicants regard as the invention. Moreover, the drawings were objected to for failing to show the convexly curved surfaces extend through an arc of about 60°. No other objections or rejections were made in the Office Action.

Status of Claims and Amendments

In response to the December 20, 2002 Office Action, Applicants have amended the specification and claims 1, 4, 7, 8 and 19 as well as added new claims 20-23 as indicated below. Also, Applicants have cancelled 5 and 15. Thus, claims 1-4, 6-14 and 16-23 are pending, with claims 1, 4, 8, 9 and 20 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of the above amendments and the following comments.

Claim Rejections - 35 U.S.C. §112

In numbered paragraphs 1 and 2 of the Office Action, claims 1-19 were rejected under 35 U.S.C. §112, second paragraph. In response, Applicants have amended claims 1 and 19 to clarify claims 1-19.

Applicants believe that all of the claims now comply with 35 U.S.C. §112, second paragraph. Withdrawal of the rejection is respectfully requested.

Drawings

In numbered paragraph 3 of the Office Action, the drawings were objected to as failing to comply with 37 CFR §1.83(a). In response, Applicants have filed herewith a Request for Approval of Replacement Drawing Sheet to show the arc α of the convexly curved

Appl. No. 10/005,178
Amendment dated March 19, 2003
Reply to Office Action of December 20, 2002

surfaces. Applicants believe that the drawings now comply with 37 CFR §1.83(a).

Applicants respectfully request withdrawal of the objections.

Rejections - 35 U.S.C. § 102

In numbered paragraphs 4 and 5 of the Office Action, claims 1-3, 5 and 12-16 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,779,901 (Halling). In response, Applicants have amended independent claim 1 to clearly define the present invention over the prior art of record.

In particular, independent claim 1 now recites a metallic seal having an *S-shaped* cross-sectional profile. Clearly, this structure is *not* disclosed or suggested by Halling or any other prior art of record. It is well settled under U.S. patent law that for a reference to anticipate a claim, the reference must disclose each and every element of the claim within the reference. Therefore, Applicant respectfully submits that claim 1, as now amended, is not anticipated by the prior art of record. Withdrawal of this rejection is respectfully requested.

Moreover, Applicants believe that the dependent claims 2, 3, 5 and 12-16 are also allowable over the prior art of record in that they depend from independent claim 1, and therefore are allowable for the reasons stated above. Also, the dependent claims 2, 3, 5 and 12-16 are further allowable because they include additional limitations. Thus, Applicants believe that since the prior art of record does not anticipate the independent claim 1, neither does the prior art anticipate the dependent claims.

Applicants respectfully request withdrawal of the rejections.

Rejections - 35 U.S.C. § 103

In numbered paragraphs 6 and 7 of the Office Action, claims 4, 6-11 and 17-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,779,901 (Halling). In response, Applicants have amended independent claim 1 as mentioned above

and dependent claims 4, 8 and 9 such that all of these claims define over the prior art of record.

More specifically, independent claims 1, 4, 8 and 9 all now clearly recite the metallic seal having an *S-shaped* cross-sectional profile with convexly curved surfaces forming oppositely facing annular sealing surfaces. Clearly this arrangement is *not* disclosed or suggested by the Halling patent or any other prior art of record. It is well settled in U.S. patent law that the mere fact that the prior art can be modified does *not* make the modification obvious, unless the prior art *suggests* the desirability of the modification. Accordingly, the prior art of record lacks any suggestion or expectation of success for combining the patents to create the Applicants' unique configuration of the metallic seal as set forth in the independent claims.

More specifically, if the Halling patent were some how modified to be S-shaped in cross-section to meet the claims of the present invention, it would require a complete reconstruction of the Halling patent, which would destroy the teaching of the Halling patent. Therefore, Applicants respectfully request that this rejection be withdrawn in view of the above comments and amendments.

Prior Art Citation

In the Office Action, additional prior art references were made of record which show S-shaped seals. Applicants believe that these references do not render the claimed invention obvious in view of the current scope of the independent claims. Thus, allowance of the pending claims is respectfully requested.

New Claims 20-23

New independent claim 20 recites a metallic seal having an S-shaped cross-sectional profile with the first and second sealing surfaces being located closer to the midpoints of the

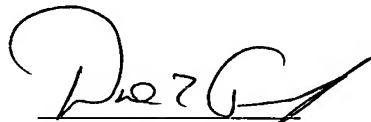
Appl. No. 10/005,178
Amendment dated March 19, 2003
Reply to Office Action of December 20, 2002

first and second convexly curved surfaces than to the opposite ends of the annular center section and the first and second free ends, respectively. Applicants do not believe that the S-shaped seals of record show this configuration. Therefore, Applicants believe that independent claim 20 and dependent claims 21-23 are allowable over the prior art of record.

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In view of the foregoing amendment and comments, Applicants respectfully assert that claims 1-4, 6-14 and 16-23 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested.

Respectfully submitted,



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